

Release of AHRQ Quality Indicators™ Software for SAS QI v2019 ICD-10-CM/PCS, July 2019

The Agency for Healthcare Research and Quality (AHRQ) announces the release of the AHRQ Quality Indicators (QI) software for SAS QI version v2019. This software applies to all four modules: the Prevention Quality Indicators (PQI), Inpatient Quality Indicators (IQI), Patient Safety Indicators (PSI), and Pediatric Quality Indicators (PDI).

All of the relevant AHRQ QI™ software and documentation regarding v2019 ICD-10-CM/PCS can be found on the AHRQ QI Web site at <http://www.qualityindicators.ahrq.gov>.

The following sections summarize the major changes from Technical Specifications and QI Software v2018 to v2019 ICD-10-CM/PCS.

1.0 Fiscal Year 2019 Coding Updates

The AHRQ QI software v2019 ICD-10-CM/PCS reflects coding changes based on fiscal year 2019 coding updates to the *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD-10-CM/PCS). These coding changes impact all software modules.

2.0 Specification Changes

The SAS QI v2019 ICD-10-CM/PCS software implements specification and programming changes that were developed through a detailed deliberation and assessment process with AHRQ personnel and other AHRQ stakeholders.

The fiscal year coding updates and specification changes were implemented across all modules and are detailed in the Log of Coding Updates and Revisions for each AHRQ QI module. These are available at the following web address:

- PQI: https://www.qualityindicators.ahrq.gov/Downloads/Modules/PQI/V2019/ChangeLog_PQI_v2019.pdf
- IQI: https://www.qualityindicators.ahrq.gov/Downloads/Modules/IQI/V2019/ChangeLog_IQI_v2019.pdf
- PSI: https://www.qualityindicators.ahrq.gov/Downloads/Modules/PSI/V2019/ChangeLog_PSI_v2019.pdf
- PDI: https://www.qualityindicators.ahrq.gov/Downloads/Modules/PDI/V2019/ChangeLog_PSI_v2019.pdf

3.0 Population Files

The updated QI population file intercensal and postcensal estimates of county-level population by single-year age group, sex, race, and Hispanic origin covering the years 2000 through 2018 from the US Census Bureau. The population file uses Census estimates for single year age population to create AHRQ age bands. Please see the details around the population methodology at:

http://www.qualityindicators.ahrq.gov/Downloads/Software/SAS/V2019/AHRQ_QI_v2019_ICD10_Population_File.pdf.

4.0 Reporting Rates for Specific Measures

The AHRQ SAS QI v2019 ICD-10-CM/PCS software includes risk-adjustment, signal variance, reference population rates, and composite weights for PSI, IQI, PDI, and PQI modules using the 2016 HCUP state inpatient databases. The non-risk adjusted numerators, denominators, and observed rates are also reported.

In the IQI module of AHRQ SAS QI v2019 ICD-10-CM/PCS, the All Patient Refined Diagnosis Related Groups (APR-DRGs) in the risk-adjustment models are based on the patient's discharge diagnosis and does not consider present on admission (POA) information.

Users interested in calculating expected, risk-adjusted, smoothed, or composite values must have major diagnostic categories (MDCs) assigned for each discharge on their input file. MDCs are used in risk adjustment, and although the AHRQ SAS QI v2019 ICD-10-CM/PCS software includes a macro to calculate MDC, it does not account for assignments for pre-MDC DRGs or multiple trauma cases (MDC 24). Different versions of the MS-DRG grouper produce slightly different results with respect to certain high resource intensity MS-DRGs. Specifically, MS-DRGs 001-017 and 981-989 are classified as “preMDC” MS-DRGs, which means that they are associated with such high length of stay and/or cost that they supersede the usual assignment of MS-DRGs within body system or MDC categories. For records assigned to these MS-DRGs, some versions of the grouper software retain the MDC that would be assigned based on the principal diagnosis and procedure codes, whereas other versions of the grouper software overwrite the MDC assignment with a blank, missing, or nonnumeric value such as “PRE.” For those users who need to construct MDC, please view the documentation and software available here:

<https://downloads.cms.gov/files/MS-DRG-V36-0-R0-MSGMCE-V36-0-R0-MCE-V36-0-R0.zip>

5.0 Retired Area-Level Indicators

The AHRQ SAS QI v2019 ICD-10-CM/PCS software does not include the following measures because they were retired:

- PQI 02 Perforated Appendix Admission Rate
- PQI 09 Low Birth Weight Rate
- PQI 10 Dehydration Admission Rate
- PDI 17 Perforated Appendix Admission Rate

6.0 Retired Provider-Level Indicators

The AHRQ SAS QI v2019 ICD-10-CM/PCS software does not include the following measures because they were retired:

- IQI 01 Esophageal Resection Volume
- IQI 02 Pancreatic Resection Volume
- IQI 04 Abdominal Aortic Aneurysm (AAA) Repair Volume

- IQI 05 Coronary Artery Bypass Graft (CABG)
- IQI 06 Percutaneous Coronary Intervention (PCI) Volume
- IQI 07 Carotid Endarterectomy Volume
- IQI 13 Craniotomy Mortality Rate
- IQI 14 Hip Replacement Mortality Rate
- NQI 01 Neonatal Iatrogenic Pneumothorax Rate
- PDI 02 Pressure Ulcer Rate
- PDI 03 Retained Surgical Item or Unretrieved Device Fragment Count
- PDI 11 Postoperative Wound Dehiscence Rate
- PDI 13 Transfusion Reaction Count
- PSI 16 Transfusion Reaction Count

7.0 Enhancements and Fixes to Software Bugs Found in v2018

The SAS QI v2019 ICD-10-CM/PCS software includes enhancements and issue resolution from the v2018 ICD-10-CM/PCS software. To learn more about changes made to the QI software, access the Log of Changes document:

- PQI: https://www.qualityindicators.ahrq.gov/Downloads/Modules/PQI/V2019/ChangeLog_PQI_v2019.pdf
- IQI: https://www.qualityindicators.ahrq.gov/Downloads/Modules/IQI/V2019/ChangeLog_IQI_v2019.pdf
- PSI: https://www.qualityindicators.ahrq.gov/Downloads/Modules/PSI/V2019/ChangeLog_PSI_v2019.pdf
- PDI: https://www.qualityindicators.ahrq.gov/Downloads/Modules/PDI/V2019/ChangeLog_PSI_v2019.pdf

For questions, please contact QIs support at qisupport@ahrq.hhs.gov or (301) 427-1949.